

Table A-22. Company and other non-Federal funds for industrial R&D performance in the U.S. as a percent of net sales of companies that performed industrial R&D in the U.S., by industry and size of company, ranked by size of nonfederally funded R&D program: 2001

Industry and size of company	NAICS codes	Company and other non-Federal R&D funds			Company and other non-Federal R&D funds as a percent of net sales		
		First 4 companies	Next 4 companies	Next 12 companies	First 4 companies	Next 4 companies	Next 12 companies
		[In millions of dollars]			[Percent]		
Distribution by industry:							
All industries	21-23, 31-33, 42, 44-81	19,482	13,730	20,675	13.8	6.4	5.4
Manufacturing	31-33	18,479	9,751	14,844	12.5	3.7	5.4
Food	311	771	237	322	1.0	0.4	0.5
Beverage and tobacco products	312	119	31	1	0.4	0.6	0.1
Textiles, apparel, and leather	313-16	59	37	53	1.0	0.9	1.7
Wood products	321	103	11	7	1.4	0.5	0.1
Paper, printing and support activities	322, 323	2,172	194	154	3.6	0.5	0.7
Petroleum and coal products	324	992	51	2	0.5	0.1	0.0
Chemicals	325	5,313	3,801	3,503	7.9	8.1	6.1
Basic chemicals	3251	455	280	467	2.1	7.5	2.3 (S)
Resin, synthetic rubber, fibers, and filament	3252	2,214	204	83	7.3	1.7	1.0
Pharmaceuticals and medicines	3254	5,294	2,577	1,449	8.1	7.6	9.1
Other chemicals	325 minus (3251-52, 3254)	1,548	352	431	5.0	3.2	2.4
Plastics and rubber products	326	622	178	211	4.4	2.2	2.3
Nonmetallic mineral products	327	216	84	91	1.4	2.0	1.3
Primary metals	331	247	60	78	1.0	0.8	0.5
Fabricated metal products	332	716	156	177	3.4	2.8	0.8
Machinery	333	2,239	752	960	9.3	5.4	3.8
Computer and electronic products	334	13,213	3,387	5,755	18.7	6.7	6.8
Computers and peripheral equipment	3341	1,797	430	378	6.8	9.8	6.0
Communications equipment	3342	9,461	893	1,072	20.6	15.1	7.0
Semiconductor and other electronic components	3344	5,876	1,839	2,599	12.9	6.2	17.4
Navigational, measuring, electromedical, and control instruments	3345	3,211	1,129	1,119	5.7	12.3	9.7
Other computer and electronic products	334 minus (3341-42, 3344-45)	263	61	44	13.7	8.7	3.4
Electrical equipment, appliances, and components	335	1,917 (S)	329	402	2.0 (S)	2.1	2.8
Transportation equipment	336	13,551	3,300	2,145	4.2	3.4	2.4
Motor vehicles, trailers, and parts	3361-63	13,551	812	905	4.2	2.8	1.7
Aerospace products and parts	3364	3,300	585	187	3.4	1.8	3.3
Other transportation equipment	336 minus (3361-64)	593 (S)	116	50	3.0	1.7 (S)	1.2

See explanatory information and SOURCE at end of table.

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		[In millions of dollars]			[Percent]		
Distribution by industry:							
Furniture and related products	337	131	58	38	1.0 (S)	1.0	0.8
Miscellaneous manufacturing	339	3,930	638	698	13.7	7.3	4.4
Medical equipment and supplies	3391	3,930	625	512	13.7	7.7 (S)	6.3
Other miscellaneous manufacturing	339 minus (3391)	310	84	95	3.0	2.7	2.1
Other manufacturing	31-33 minus (311-16, 321-27, 331-37, 339)	--	--	--	--	--	--
Nonmanufacturing	21-23, 42, 44-81	13,995	5,444	8,388	13.7	19.0	6.0
Mining, extraction, and support activities	21	712	84	40	1.8	0.5	0.7
Utilities	22	38	28	34	0.1	0.1	0.0
Construction	23	154	52	15	1.4	2.5	0.2
Trade	42, 44, 45	11,206	3,942	4,714	12.1	9.4	15.4
Transportation and warehousing	48, 49	376	21	6	0.8	0.2	0.1
Information	51	7,401	1,260	2,057	18.3	1.1	13.0
Publishing	511	6,617	856	1,679	22.2	22.3	11.1
Newspaper, periodical, book, and database	5111	376	55	23	3.7	1.4	0.3
Software	5112	6,617	856	1,600	22.2	22.3	18.2
Broadcasting and telecommunications	513	819	129 (S)	91	0.4	0.3	1.9
Radio and television broadcasting	5131	22	0	0	(D)	0.0	0.0
Telecommunications	5133	819	129 (S)	55	0.4	0.3	10.8
Other broadcasting and telecommunications	513 minus (5131, 5133)	(D)	0	0	(D)	0.0	0.0
Other information	51 minus (511, 513)	1,461	210	198	4.1	7.6	5.7
Finance, insurance, and real estate	52, 53	760	475	431	1.3	0.9	0.3
Professional, scientific, and technical services	54	2,898 (S)	1,143	1,820	15.6 (S)	52.8	26.9
Architectural, engineering, and related services	5413	780	314	242	31.1	36.4	5.4
Computer systems design and related services	5415	2,109 (S)	458	797	18.8 (S)	17.2	6.4
Scientific R&D services	5417	1,627	809	1,274	15.1 (S)	55.6 (S)	42.7
Other professional, scientific, and technical services	54 minus (5413, 5415, 5417)	235	71	54	(D)	1.0	1.5
Management of companies and enterprises	55	107	11	1	(D)	7.7 (S)	0.2
Health care services	621-23	282	30	25	3.7	(D)	0.4
Other nonmanufacturing	56, 61, 624, 71, 72, 81	304	94	97	2.3	3.6	0.4

See explanatory information and SOURCE at end of table.

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		[In millions of dollars]			[Percent]		
Distribution by size of company: [Number of employees]							
Total		19,482	13,730	20,675	13.8	6.4	5.4
5 to 24		28	17	31	102.5	11.2 (S)	2.5
25 to 49		146	72	103	69.0	157.0	150.5
50 to 99		159	94	202	63.9	141.4	169.1
100 to 249		327	254	584	101.5	13.7 (S)	149.2
250 to 499		467	311	693	154.9	101.6	66.4
500 to 999		870	566	1,099	110.5	60.0	32.1
1,000 to 4,999		2,129	1,503	2,943	81.4	17.6	22.6
5,000 to 9,999		2,902	1,972	3,878	19.3	12.1	9.4
10,000 to 24,999		7,313	4,138	7,258	17.8	13.5	7.1
25,000 or more		19,482	13,214	18,392	13.8	6.0	4.8

KEY: (D) = Data have been withheld to avoid disclosing operations of individual companies
(S) = Indicates imputation of more than 50 percent.
(--) = Indicates data not collected.

NOTES: Rankings were based on company and other R&D funds.

The R&D in this table is the industrial R&D performed within company facilities funded from all sources except the Federal Government. The funds predominantly are the company's own, but also include funds from outside organizations such as other companies, research institutions, universities and colleges, nonprofit organizations, and State governments. Excluded from this table are company-funded R&D not performed within the company (e.g., R&D contracted out to other organizations) and company-funded R&D not performed within the 50 U.S. states or D.C. (e.g., R&D not performed on U.S. soil by foreign subsidiaries or other foreign organizations).

Starting in 1999, the frame from which the statistical samples were selected was divided into two partitions based on total company employment. In the manufacturing sector, companies with employment of 50 or more were included in the large company partition. In the nonmanufacturing sector, companies with employment of 15 or more were included in the large company partition. Companies in the respective sectors with employment below these values, but with at least 5 employees, were included in the small company partition. The purpose of partitioning the sample this way was to reduce the variability in industry estimates largely attributed to the random year-to-year selection of small companies by industry and the high sampling weights that sometimes were assigned to them. Because of this, in prior reports detailed industry statistics were published only from the large company partition; detailed industry statistics from the small company partition were not. Statistics from the small company partition were included in the manufacturing, nonmanufacturing, and all industries totals, but were aggregated into "small manufacturing" and "small nonmanufacturing" classifications instead of being included in their respective industry classifications. For this report, this practice was evaluated and discontinued because it was determined that the data for small companies are more useful if they are included in their respective industries even given the sampling concerns described above. Consequently, the "small manufacturing" and "small nonmanufacturing" stublines are no longer present. Statistics for the firms in the small company classifications are not shown separately in this table, but are included in the manufacturing, nonmanufacturing, and all industries totals. For more information, see the technical notes in Survey of Industrial Research and Development Methodology: 2001 at <http://www.nsf.gov/sbe/srs/sird/start.htm>.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2001